

REMARKS

I. Status of the Application

In view of the above amendments and the following remarks, reconsideration of the rejections set forth in the Office Action of April 2, 2010 is respectfully requested.

By this amendment, claims 29 and 32 have been amended, claims 31, 33-44, and 48-56 have been cancelled without prejudice or disclaimer to the subject matter contained therein, and claims 60-70 have been added. Claims 29, 30, 32, and 57-70 are now pending in the application. No new matter has been added by these amendments.

The specification has been revised. No new matter has been added by these revisions. Entry of the specification amendments is respectfully requested.

II. Election of January 7, 2010

As indicated in the Response of January 7, 2010, Applicants have elected Species A. Despite the fact that the Examiner has indicated that claims 34 and 35 read on Species A, and despite the fact that Applicants requested examination on the merits of the elected claims, the Office Action indicates that claims 34 and 35 are not examined on the merits because those claims were previously withdrawn. Claims 34 and 35 have been cancelled by this amendment and new claims 61 and 62, which correspond in scope to claims 34 and 35, have been added. Accordingly, in view of the fact that the Examiner has indicated that this subject matter reads on the elected species, examination on the merits of claims 61 and 62 is respectfully requested.

Additionally, new independent claim 63 includes all the limitations of claim 29 and reads on Species A. Dependent claims 64-70 depend from claim 63 and also read on Species A. Accordingly, examination on the merits of all the pending claims is respectfully requested.

III. Prior Art Rejections

Currently, claims 29, 30, and 57-59 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Hiroshi (JP 11-232674), claims 31 and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hiroshi (JP 11-232674) in view of Saimi et al. (US 6,430,137), and claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hiroshi in view of Saimi et al. in view of Mizuno et al. (US 2004/0114494)

It is submitted that the present invention, as defined in the amended claims, is now clearly distinguished over the applied prior art for the following reasons. Claim 29 recites an optical disk apparatus for recording or reproducing information on or from an optical disk which has a transparent planar disk base member, a recording layer formed on the disk base member, and a reflecting layer for reflecting a laser beam by way of the disk base member, the reflecting layer being disposed on an opposite side of the disk base member than the recording layer, and the optical disk being configured such that an interval between the recording layer and the reflecting layer is longer than a wavelength of the laser beam, said optical disk apparatus comprising: a light source which irradiates the laser beam for recording or reproducing the information on or from the optical disk, wherein said light source irradiates the laser beam onto the recording layer of the optical disk by way of the disk base member to form a focusing spot on the recording layer; a photo detector which receives from the reflecting layer a reflected beam of the laser beam irradiated from said light source; a tilt detecting unit which detects tilt of the optical disk by using an output from said photo detector; a beam splitter which splits the reflected beam and the laser beam incident onto the optical disk such that the reflected beam and the laser beam incident onto the optical disk propagate along different optical paths from each other; an objective lens which focuses the laser beam split by the beam splitter onto the recording

layer of the optical disk; an objective lens actuator which moves the objective lens to focus the laser beam onto the recording layer of the optical disk; an aberration canceling unit which is disposed on an optical path for guiding the reflected beam to the photo detector to cancel a defocus aberration and a spherical aberration of the reflected beam split by the beam splitter, and wherein the aberration canceling unit includes a condenser lens which focuses the reflected beam on the photo detector and a condenser lens actuator which moves the condenser lens to cancel the aberration of the reflected beam.

On page 6 of the Office Action, the Examiner acknowledges that the Hiroshi and Saimi references do not disclose an aberration canceling means including a condenser lens and a condenser lens moving means. However, it is asserted that the Mizuno et al. reference discloses such a configuration, and that it would have been obvious to modify the apparatus of Hiroshi in view of Mizuno et al. to yield the claimed invention. Claim 29 has been amended to recite a beam splitter which splits the reflected beam and the laser beam incident onto the optical disk such that the reflected beam and the laser beam incident onto the optical disk propagate along different optical paths from each other, an objective lens actuator, and condenser lens actuator. As can be seen in figure 34, the embodiment of the Mizuno et al. reference which is relied on by the Examiner discloses an optical system in which a single driving unit (24) is provided to adjust only the objective lens (337); no separate condenser lens actuator is provided. Moreover, in the system of Mizuno et al. the reflected beam (346) travels along the same optical path between the optical disc (18) and the module (43) as the laser beam (44), as seen in figure 34. Because Mizuno et al. does not disclose a beam splitter which splits the reflected beam and the laser beam incident onto the optical disk such that the reflected beam and the laser beam incident onto the

optical disk propagate along different optical paths from each other, an objective lens actuator, and condenser lens actuator, Mizuno et al. cannot meet the requirements of claim 29.

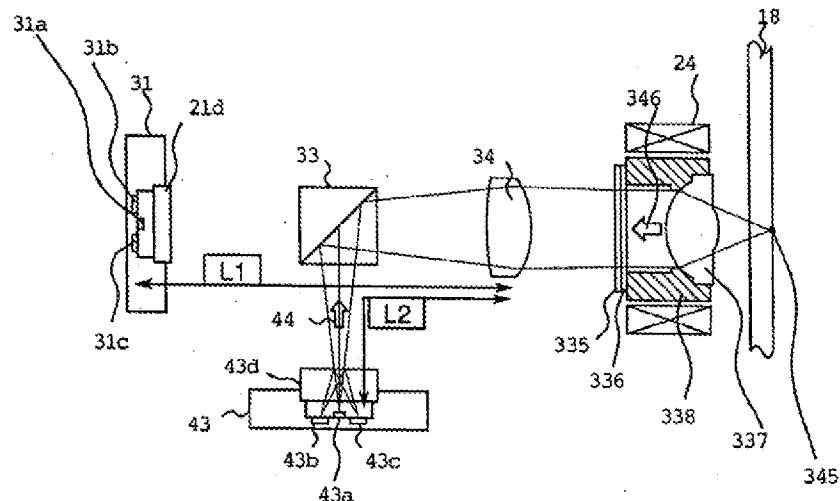


Figure 34 of Mizuno et al. (US 2004/0114494)

The claimed configuration of the present application provides significant advantages over the prior art. Specifically, because the present invention utilizes a beam splitter which splits the laser beam incident on the optical disk and the reflected beam onto different optical paths, a condenser lens actuator can be provided which is distinct from and independent of the objective lens actuator, and thus the laser beam incident on the optical disk is not affected by the movement of the condenser lens actuator. This allows the laser beam to be focused on a predetermined recording layer by the objective lens while the aberration of the reflected beam is independently cancelled by the aberration canceling unit. Accordingly, Applicants submit that the above-discussed claim limitations are critical to the present invention and result in significant advantages which are not achieved in the prior art of record.

Further, it appears as though there would have been no reason to modify any of the prior art of record to yield a configuration which would meet the requirements of claim 29. It is thus

submitted that the invention of the present application, as defined in claim 29, is not anticipated nor rendered obvious by the prior art, and yields significant advantages over the prior art. Allowance is respectfully requested.

Claims 30, 32, and 57-60 depend, directly or indirectly, from claim 29 and are thus allowable for at least the reasons set forth above in support of claim 29. Claim 63 includes limitations identical to those discussed above with respect to claim 29 and is thus allowable for at least the reasons set forth above in support of claim 29. Claims 64-70 depend from claim 63 and are thus allowable at least by virtue of their dependencies.

In view of the foregoing amendments and remarks, inasmuch as all of the outstanding issues have been addressed, it is respectfully submitted that the present application is now in condition for allowance, and action to such effect is earnestly solicited. Should any issues remain after consideration of the response, however, the Examiner is invited to telephone the undersigned at the Examiner's convenience.

Respectfully submitted,

Yoshiharu KOBAYASHI et al.

By  /Andrew D. St.Clair/

Digitally signed by /Andrew D. St.Clair/
DN: cn=/Andrew D. St.Clair/, o, ou,
email=astclair@wenderoth.com, c=US
Date: 2010.06.30 14:40:59 -04'00'

Andrew D. St.Clair
Registration No. 58,739
Attorney for Applicants

ADS/rgf
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
June 30, 2010